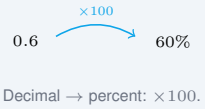
Converting Fractions, Decimals, and Percents

Name: _____	Date: _____	Score: _____ / 18

Quick Review and Helpful Hints

To convert: *fraction→decimal*, divide; *decimal→percent*, multiply by 100 (move the point 2 right); *percent→decimal*, divide by 100 (move 2 left); *decimal→fraction*, write over a power of ten and simplify.

▷ **Example:** Write 0.6 as a percent. **Work:** Multiply by 100 (move the point two places right): $0.6 \times 100 = 60$. ★ **Answer:** 60%



Practice Problems

Convert as directed.

1. 0.5 as a percent _____
2. 0.25 as a percent _____
3. 0.6 as a percent _____
4. 75% as a decimal _____
5. 20% as a decimal _____
6. $\frac{1}{2}$ as a percent _____
7. $\frac{1}{4}$ as a percent _____
8. 0.05 as a percent _____
9. 40% as a decimal _____
10. $\frac{3}{5}$ as a percent _____
11. 0.9 as a percent _____
12. 10% as a fraction _____
13. $\frac{1}{5}$ as a percent _____
14. 100% as a decimal _____

Word Problems

15. A test score is 0.8. Write it as a percent. _____
16. A 25% discount written as a decimal is what? _____
17. In a GED review group, $\frac{1}{2}$ of the students choose extra fraction practice. What percent of the group is that? _____
18. A class budget uses 30% of its funds for printing packets. What fraction of the budget is that in simplest form? _____

Answer Keys

1. 50%	**7.** 25%	**13.** 20%
2. 25%	**8.** 5%	**14.** 1
3. 60%	**9.** 0.4	**15.** 80%
4. 0.75	**10.** 60%	**16.** 0.25
5. 0.2	**11.** 90%	**17.** 50%
6. 50%	**12.** $\frac{1}{10}$	**18.** $\frac{3}{10}$

Step-by-Step Explanations

1. Start by naming the process: Read what the problem is asking, choose the matching rule, write the setup, and then simplify one step at a time. The setup/work is $0.5 \times 100 = 50\%$. So the final answer is 50%.

2. A good way to think about this is: Read what the problem is asking, choose the matching rule, write the setup, and then simplify one step at a time. The setup/work is $0.25 \times 100 = 25\%$. So the final answer is 25%.

3. Step by step: Read what the problem is asking, choose the matching rule, write the setup, and then simplify one step at a time. The setup/work is $0.6 \times 100 = 60\%$. So the final answer is 60%.

4. Take it one move at a time: Read what the problem is asking, choose the matching rule, write the setup, and then simplify one step at a time. The setup/work is $75 \div 100 = 0.75$. So the final answer is 0.75.

5. Start by naming the process: Read what the problem is asking, choose the matching rule, write the setup, and then simplify one step at a time. The setup/work is $20 \div 100 = 0.2$. So the final answer is 0.2.

6. A good way to think about this is: Read what the problem is asking, choose the matching rule, write the setup, and then simplify one step at a time. The setup/work is $\frac{1}{2} = 0.5 = 50\%$. So the final answer is 50%.

7. Step by step: Read what the problem is asking, choose the matching rule, write the setup, and then simplify one step at a time. The setup/work is $\frac{1}{4} = 0.25 = 25\%$. So the final answer is 25%.

8. Take it one move at a time: Read what the problem is asking, choose the matching rule, write the setup, and then simplify one step at a time. The setup/work is $0.05 \times 100 = 5\%$. So the final answer is 5%.

9. Start by naming the process: Read what the problem is asking, choose the matching rule, write the setup, and then simplify one step at a time. The setup/work is $40 \div 100 = 0.4$. So the final answer is 0.4.

10. A good way to think about this is: Read what the problem is asking, choose the matching rule, write the setup, and then simplify one step at a time. The setup/work is $\frac{3}{5} = 0.6 = 60\%$. So the final answer is 60%.

11. Step by step: Read what the problem is asking, choose the matching rule, write the setup, and then simplify one step at a time. The setup/work is $0.9 \times 100 = 90\%$. So the final answer is 90%.

12. Take it one move at a time: Read what the problem is asking, choose the matching rule, write the setup, and then simplify one step at a time. The setup/work is $10\% = \frac{10}{100} = \frac{1}{10}$. So the final answer is $\frac{1}{10}$.

13. Start by naming the process: Read what the problem is asking, choose the matching rule, write the setup, and then simplify one step at a time. The setup/work is $\frac{1}{5} = 0.2 = 20\%$. So the final answer is 20%.

14. A good way to think about this is: Read what the problem is asking, choose the matching rule, write the setup, and then simplify one step at a time. The setup/work is $100 \div 100 = 1$. So the final answer is 1.

15. Step by step: Read what the problem is asking, choose the matching rule, write the setup, and then simplify one step at a time. The setup/work is $0.8 \times 100 = 80\%$. So the final answer is 80%.

16. Take it one move at a time: Read what the problem is asking, choose the matching rule, write the setup, and then simplify one step at a time. The setup/work is $25 \div 100 = 0.25$. So the final answer is 0.25.

17. Start by naming the process: Read what the problem is asking, choose the matching rule, write the setup, and then simplify one step at a time. The setup/work is $\frac{1}{2} = 50\%$. So the final answer is 50%.

18. A good way to think about this is: Read what the problem is asking, choose the matching rule, write the setup, and then simplify one step at a time. The setup/work is $30\% = \frac{30}{100} = \frac{3}{10}$. So the final answer is $\frac{3}{10}$.

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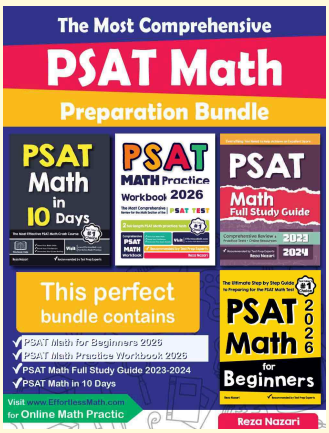

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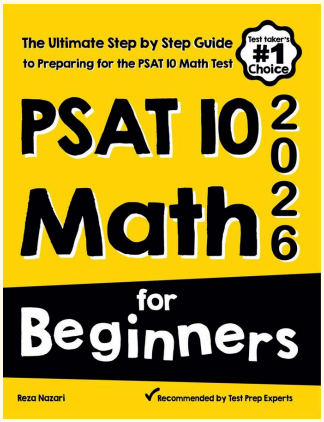

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